

## CLAIMS

What is claimed is:

1. An apparatus for collecting mixtures of solid and liquid waste materials, comprising:  
a container having a plurality of inner wall surfaces configured for receiving a volume of liquid and solid waste materials; and  
means for preventing hardening materials from adhering to said inner walls surfaces of said container.
2. An apparatus as recited in claim 1, wherein said solid and liquid waste materials comprise waste concrete and liquids from washing out a concrete carrying vehicle and/or tools.
3. An apparatus as recited in claim 1:  
wherein said means comprises a liner retained on the inner walls of said container;  
wherein said liner is of a material to which hardening solid and liquid waste materials will not substantially adhere.
4. An apparatus as recited in claim 3, wherein said liner comprises a coating on the interior of said container which is resistant to the adherence of hardening concrete.
5. An apparatus as recited in claim 3, wherein said liner comprises a solid material joined to the interior of said container and which is resistant to the adherence of hardening concrete.
6. An apparatus as recited in claim 3, wherein said material of said liner is a polymeric material.

7. An apparatus as recited in claim 1, further comprising:  
a pair of vehicle ramps coupled to a first end of said container; and  
wherein said vehicle ramps are configured to provide an inclined plane of  
sufficient strength to support a vehicle driving up said vehicle ramps to said container  
for emptying and washing out solid waste materials from said vehicle into said  
container.

8. An apparatus as recited in claim 7, further comprising:  
a door coupled to a second end of said container and configured for sealing  
the end of said container to allow retention of solid and liquid waste materials, until  
said door is opened for the unloading of said waste materials.

9. An apparatus as recited in claim 6, further comprising means for  
articulating said vehicle ramp between an extended position configured to operate as  
an inclined plane during use and a non-extended position.

10. An apparatus as recited in claim 7, wherein said means for articulating  
comprises a hinge assembly on each vehicle ramp allowing at least a portion of said  
ramp to be moved between extended and non-extended positions.

11. An apparatus as recited in claim 1, further comprising:  
a pair of skids attached to the bottom of said container;  
wherein said skids are configured for supporting said container in an upright  
position during use; and  
wherein said skids are configured for guiding said container during loading or  
unloading of said container from a transport vehicle.

12. An apparatus for collecting waste concrete, comprising:  
a container having a plurality of inner wall surfaces lined with a material to  
which hardened concrete will not adhere; and

a pair of vehicle ramps coupled to one end, or side, of said container.

13. An apparatus as recited in claim 12, wherein said inner wall surfaces are lined with a liner that comprises a coating on the interior of said container which is resistant to the adherence of hardening concrete.

14. An apparatus as recited in claim 12, wherein said inner wall surfaces are lined with a liner that comprises a solid material joined to the interior of said container and which is resistant to the adherence of hardening concrete.

15. An apparatus as recited in claim 12, wherein said material is a polymeric material.

16. An apparatus as recited in claim 12:  
further comprising hinges coupling said vehicle ramps to said container; and  
wherein said ramps may be rotated on said hinges between an extended position allowing said ramps to be driven over by the wheels of a vehicle, and a non-extended position.

17. An apparatus as recited in claim 12, further comprising means for urging said ramps into a retracted and/or extended position.

18. An apparatus as recited in claim 12, further comprising at least one wheel stop coupled to said ramp for limiting upward vehicle travel on said ramps.

19. An apparatus as recited in claim 12, further comprising:  
a pair of stabilizer skids attached to the bottom of said container.

20. An apparatus as recited in claim 12, further comprising:  
a door enclosing an opening on one end or side of said container.

21. An apparatus as recited in claim 20, wherein said door encloses an entire end or side of said container and is configured to allow emptying said container of solidified concrete waste materials without being constricted on passage through said door.

22. An apparatus as recited in claim 20, wherein said vehicle ramps are not attached to said end or side of said container enclosed by said door.

23. An apparatus as recited in claim 20, further comprising a watertight seal configured for retention under pressure between said door and an opening in said container to form a water-tight seal which allows retaining liquid concrete waste material within said container without leakage.

24. An apparatus for collecting concrete waste and washout, comprising:  
a container configured for watertight retention of received concrete waste and washout material;  
a plurality of inner wall surfaces within said container which are lined with a material to which hardened concrete will not adhere;  
a pair of vehicle ramps coupled to a side or end of said container; and  
a door coupled to a side or end of said container.

25. An apparatus as recited in claim 24, further comprising a pair of stabilizer skids attached to the bottom of said container for supporting said container in an upright position when in use.

26. An apparatus as recited in claim 25, wherein said skids are configured for guiding said container onto or off of a truck adapted for transporting said container.

27. An apparatus as recited in claim 24, wherein said vehicle ramps are configured as inclined planes of sufficient strength to allow the wheels of a vehicle to

be driven over said vehicle ramps when positioning said vehicle for unloading waste concrete and washing out concrete remnants into said container.

28. An apparatus as recited in claim 27, wherein said vehicle ramps may be moved from a fully extended position for use as inclined planes to a storage position in which the ramps are not fully extended.

29. An apparatus as recited in claim 28, further comprising:  
a hinge on each of said vehicle ramps;  
wherein said hinge is configured for rotating a portion of said ramps between an extended position and a retracted position.

30. An apparatus as recited in claim 24, wherein said vehicle ramps and said door are not positioned on the same side or end of said container.

31. An apparatus as recited in claim 30, wherein said vehicle ramps and said door are positioned on opposite ends of said container.

32. An apparatus as recited in claim 24, further comprising:  
a seal configured for providing a water-tight seal between said door and an opening of said container being covered by said door for the retention of concrete waste and washout materials within said container when said door is retained in a closed position; and  
a door latch attached between said door and said container for retaining said door in a closed position for retaining solid and liquid concrete waste and allowing said door to be opened for the removal of solid concrete waste materials.

33. An apparatus as recited in claim 24, wherein said door encloses an entire end or side of said container and is configured to allow emptying said container of concrete waste materials without constriction through said door.

34. An apparatus as recited in claim 24:  
further comprising a slope on a top portion of said container adjacent to said vehicle ramps;

wherein said slope increases the vertical clearance available for vehicles driving on said vehicle ramps for positioning over said container.

35. An apparatus as recited in claim 24, further comprising a flexible skirt retained on an upper portion of said container and configured for reducing splashing of concrete waste during the washout process.

36. An apparatus as recited in claim 24, wherein said container is configured for retaining multiple cubic yards of concrete waste.

37. An apparatus as recited in claim 24, wherein said container is of steel construction..

38. An apparatus as recited in claim 24, wherein said container has a rectangular cross-section with rounded interior corners.

39. An apparatus as recited in claim 24, wherein said container has a semi-circular cross-section.

40. An apparatus as recited in claim 24, wherein said lining on said inner wall surfaces comprise a coating which is resistant to the adherence of hardening concrete.

41. An apparatus as recited in claim 24, wherein said lining on said inner wall surfaces comprises a solid material joined to the interior of said container and which is resistant to the adherence of hardening concrete.

42. An apparatus as recited in claim 24, wherein said lining comprises a polymeric material.

43. A method of controlling concrete washout, comprising:  
delivering a washout container at a site for collecting solid and liquid concrete waste material during the washout process from vehicles driven up on ramps attached to said washout container;  
servicing said washout container in response to usage at said site by removing excess water from said washout container and hauling away said water; and  
picking up said washout container with collected concrete waste material from said site.

44. A method as recited in claim 43, wherein said excess water is removed by pumping from said washout container into a mobile collection reservoir for hauling the waste water to a location for processing.

45. A method as recited in claim 43, wherein said washout container is picked up from said site when the buildup of said solid concrete waste material within said washout container limits continued washout activity, or when said washout activity at said site has concluded.

46. A method as recited in claim 43:  
further comprising emptying solid concrete waste material, which have been picked up from said site, from said washout container for processing or disposal; and  
wherein processing comprises breaking up said solid concrete waste material for recycling.

47. A method as recited in claim 46, wherein said emptying of said solid concrete waste material from said washout container comprises opening a door on one end of said washout container and urging said solid concrete waste material

from said container through said door.

48. A method as recited in claim 43, wherein urging comprises tilting said washout container and/or applying an extraction force to said solid concrete waste material.